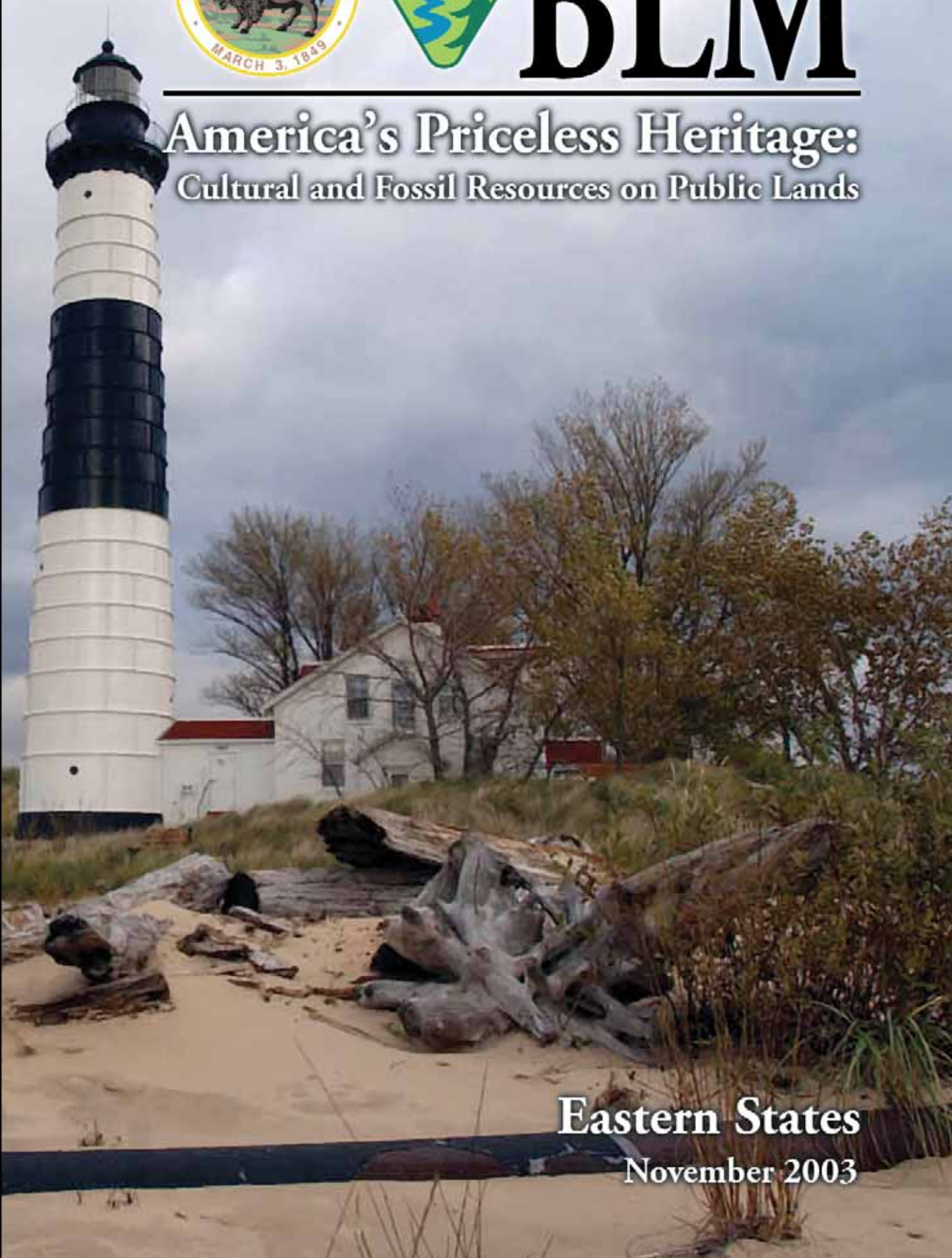




U.S. Department of the Interior

BLM

America's Priceless Heritage: Cultural and Fossil Resources on Public Lands



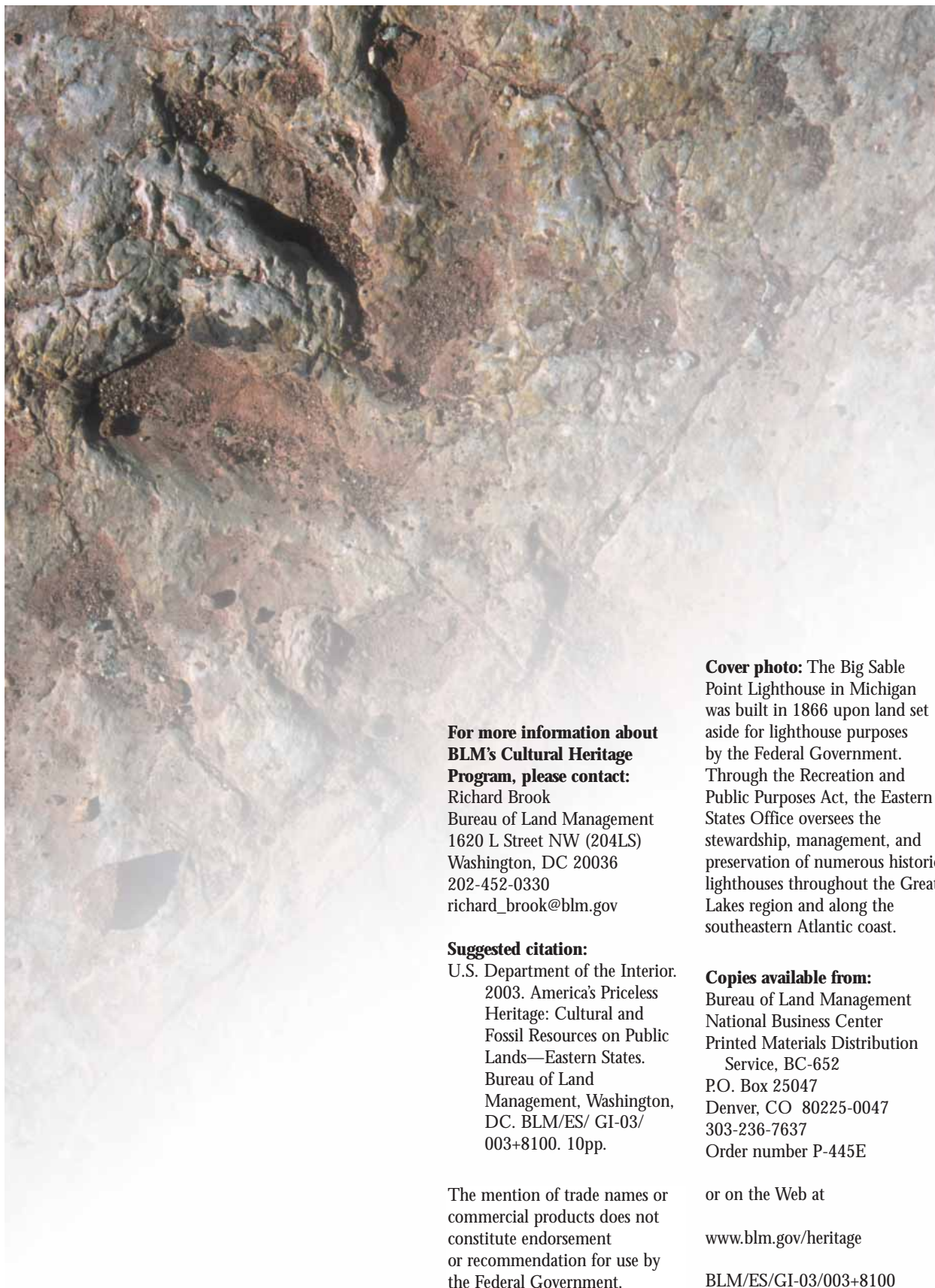
Eastern States
November 2003

America's Priceless Heritage:

Cultural and Fossil Resources on Public Lands



**U.S. Department of the Interior
Bureau of Land Management
November 2003**



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Cover photo: The Big Sable
Point Lighthouse in Michigan
was built in 1866 upon land set
aside for lighthouse purposes
by the Federal Government.
Through the Recreation and
Public Purposes Act, the Eastern
States Office oversees the
stewardship, management, and
preservation of numerous historic
lighthouses throughout the Great
Lakes region and along the
southeastern Atlantic coast.

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Preface:

An Invitation to the Reader

The Bureau of Land Management (BLM) is responsible for managing 261 million acres of public land—about one-eighth of the United States. Most of these lands are in the Western United States, including Alaska, and they include extensive grasslands, forests, high mountains, arctic tundra, and deserts. BLM also manages about 700 million acres of subsurface mineral resources, as well as numerous other resources, such as timber, forage, wild horse and burro populations, fish and wildlife habitat, wilderness areas, and archaeological, historical, and paleontological sites.

BLM administers the public lands within the framework of numerous laws, the most comprehensive of which is the Federal Land Policy and Management Act of 1976 (FLPMA). FLPMA directs BLM to follow the principle of “multiple use,” which means managing the public lands and their various resource values “so that they are utilized in the combination that will best meet the present and future needs of the American people.” This multiple use mission requires BLM to address quality of life issues, including providing clean air and water; providing recreational opportunities; protecting wildlife; and safeguarding cultural and fossil resources; as well as providing for a sound economy through the production of energy, food, and fiber and by sustaining local communities and their heritage.

Given the scope of its multiple use mission, BLM affects more Americans on a daily basis than any other land management agency. The Bureau constantly faces the challenge of ensuring a balance of land uses among perspectives that are occasionally, if not often, competing. BLM recognizes that people who live near the public lands have the most direct connection and knowledge of them, as well as a commitment to their stewardship. At the same time, the Bureau maintains a national focus because these lands belong to all Americans, whose appreciation of them continues to increase.

BLM’s central challenge is to *balance the demands of growth and the imperative for conservation*. America is entering into a new era of conservation to achieve a healthier environment and a more secure economy—what Secretary of the Interior Gale Norton





calls the “new environmentalism.” Secretary Norton sums this new environmentalism up in a visionary approach she calls the “four Cs”—using communication, cooperation, and consultation, all in the service of conservation. At the heart of the four Cs is the Secretary’s belief that for conservation to be successful, BLM must involve the people who live on, work on, and love the land.

The Bureau’s ability to partner with public land users; local residents; nonprofit groups; universities; “friends of” organizations; and State, local, and tribal governments fosters a wide and diverse support network. This network is essential not only because the agency has limited staff and budget resources, but because there is a wide variety of stakeholders who are concerned about public land management. The Bureau has been working cooperatively with partners and volunteers for decades and that work has yielded outstanding results towards attaining common goals and values.

Secretary Norton’s approach to conservation is especially relevant to the management of cultural and fossil resources on public lands. These resources are a constant source of fascination for visitors. People look to these resources for recreational opportunities...for fulfilling their curiosity about the recent and remote past...for contemplating their origins...for preserving and continuing their cultures...for finding peace and quiet. The Secretary’s approach to managing these resources was furthered on March 3, 2003, when President Bush signed a new Executive Order, which directs Federal agencies to advance the protection, enhancement, and contemporary use of historic properties, particularly by seeking public-private partnerships to promote the use of such properties as a stimulus to local economic development. The Executive Order is an important component in a new White House initiative called *Preserve America*, which was announced on March 3, 2003 by First Lady Laura Bush. The *Preserve America* program will serve as a focal point for the support of the preservation, use, and enjoyment of America’s historic places.

The Bureau is proud of its mission and understands why it is crucial to the Nation’s future. The Bureau’s vision is to live up to this ambitious mission and thereby meet the needs of the lands and our people. In order to achieve this goal, the Bureau must seek new ways of managing that include innovative partnerships and, especially, a community-based focus that

involves citizen stakeholders and governmental partners who care about the public lands and the cultural and fossil resources found on them. This document is an invitation to you—the public BLM serves—to continue your ongoing dialogue with us about the health and future of the Nation's cultural and natural legacy. Tell us what is important to you, what you care most about, what you want saved, and how BLM can work collaboratively to preserve our priceless legacy.

This document is an invitation
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ongoing dialogue with us
about the health and future
of the Nation's cultural
and natural legacy.



Eastern States





Eastern States

Statistical Overview

Acres of public land	30,000 acres
Acres inventoried for cultural properties (FY 2002)	33 acres
Acres inventoried for cultural resources (to date)	10,772 acres
Cultural properties recorded (FY 2002)	0 properties
Cultural properties recorded (to date)	85 properties
Cultural Resource Use Permits in effect (FY 2002)	0 permits
National Register of Historic Places listings (to date)	3 listings
National Register of Historic Places contributing properties	3 properties
Section 106 class III undertakings (FY 2002)	8 undertakings
Section 106 data recovery, projects (FY 2002)	0 projects
Section 106 data recovery, properties (FY 2002)	0 properties
Interpreted places	0 places

Cultural Resources

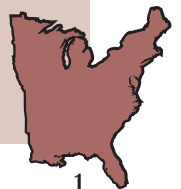
1. Program Summary

The Eastern States Office is responsible for managing public lands and resources in 31 States stretching from the Mississippi River to the Atlantic Ocean. While the percentage of public lands in this large area is small compared to that in many Western States, BLM still conducts a wide variety of activities in and around large eastern population centers that pose unique challenges and opportunities in the management of cultural resources.

The Eastern States Office is responsible for managing public lands and resources in 31 States...



The Chiles home site (mid-1700s) is just one of the historical, archaeological, and architectural properties managed by Eastern States along the Potomac River in Maryland and Virginia.



An important
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heritage
program involves
consultation
with interested
parties...



Eastern States manages nearly 100 public islands in several lakes throughout northern Minnesota. Many islands contain significant and fragile cultural resources.



Eastern States

The Eastern States cultural program staff consists of two professional archaeologists located in Jackson, Mississippi, and Milwaukee, Wisconsin. Additional services and expertise are acquired through private consultants, universities, volunteers, and partnerships—a necessity given the small staff of the Eastern States program.

Eastern States archaeologists review and provide advice on a variety of section 106 (National Historic Preservation Act) undertakings. An active lands and realty program creates an ongoing need for section 106 review prior to the transfer, acquisition, and disposal of public domain lands throughout the East. Eastern States archaeologists also review and ensure compliance on more than 40 million acres of subsurface mineral and related oil and gas permit actions.

Additionally, the Eastern States Office manages three parcels of public lands containing significant cultural or traditional properties: the Jupiter Inlet Area of Critical Environmental Concern in southern Florida; the Lake Vermilion Management Area, containing over 80 islands in several lakes throughout northern Minnesota; and approximately 2,000 acres of property along the lower Potomac River in Maryland and Virginia. Cultural program staff members are integrally involved in land use and activity planning as well as the management of these parcels.

An important component of the cultural heritage program involves consultation with interested parties—including, but not limited to, Native American tribes, State Historic Preservation Offices, and local governments. Eastern States staff members also collaborate with a wide variety of potential and existing partners. On public domain lands throughout the East, the Eastern States Office works closely with the United States Coast Guard on the transfer of more than two dozen historic lighthouses in the Great Lakes area and along the Atlantic and Gulf coasts. Partnerships such as these provide opportunities to educate the public and other agencies about BLM's role in managing important archaeological and historical resources for future generations to enjoy.

2. State Cultural History

The cultural history of the Eastern States is rich and complex. Archaeological and historical sites throughout the region range from some of the earliest prehistoric settlement sites in North America to significant historical and architectural properties.

Rock shelters and cave sites have yielded important archaeological materials dating from the Paleo-Indian tradition (around 8000 B.C.) to Archaic and Woodland components (from 7500 B.C. through contact with Europeans). BLM properties in the East also contain unique historic period resources, such as Colonial era home sites and Revolutionary and Civil War sites, as well as submerged shipwrecks, logging camps, homesteads, lighthouses, and abandoned naval barracks.

Archaeologists believe Paleo-Indian sites, commonly referred to as Clovis sites, provide the earliest evidence of migration and settlement into North America. There are several key sites in the East that provide invaluable information for contemporary Paleo-Indian studies. Some researchers at Paleo-Indian sites in the East have argued that the settlement of North America occurred much earlier than previously believed and have coined the term “pre-Clovis occupations.” Many of these sites are near BLM public lands or activities in the Eastern States. Examples of these famous sites include the Meadowcroft rock shelter in Pennsylvania, the Topper site in South Carolina, and the Thunderbird site in Virginia.

Following the Paleo-Indian tradition are the Archaic, Woodland, and Mississippian traditions—collectively spanning the entirety of prehistory in the Eastern United States (around 7500 B.C. to 1500 A.D.). In general, these periods mark a shift away from nomadic hunting and foraging to a more sedentary subsistence and settlement system. These cultural and temporal changes are identified by extensive routes of material trade and exchange, manufacturing of ceramic pottery, domestication of plants, construction of burial and effigy mounds, and an overall increase in population. These traditions are commonly associated with those of the Adena and Hopewell (moundbuilders) and the complex chiefdoms represented at Cahokia (Illinois), Moundville (Alabama), and Poverty Point (Louisiana).

European exploration and contact in the New World brought a quick end to prehistory and rapidly ushered in the historic (Euro-American) period. The arrival of Hernando DeSoto in the Southeast decimated the indigenous Native American population through war, famine, and disease. In the late 16th century, French explorers, missionaries, and fur traders moved into the upper Great Lakes region and also engaged with local Native Americans—with the same eventual results. Without question, the arrival of Europeans radically changed the cultural, social,

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Vandals using metal detectors have disturbed Colonial era historical sites within BLM's Lower Potomac River properties.



and political fabric of the Native American population and enabled Euro-American expansion throughout the entire Eastern United States.

3. Cultural Resources At Risk

Each day, cultural properties and sites throughout the Eastern States are damaged, disturbed, and threatened by natural and human forces. Vandalism, artifact collection, and looting are some of the more widespread activities having adverse effects on these properties. Even seemingly benign activities, such as visitation to historic and archaeological sites and recreational use of public lands, pose serious threats to important cultural heritage sites in these States. BLM cultural resources that are threatened or neglected within the Eastern States include:

- Rock shelters and cave sites throughout the Southeastern and Midwestern States, which are being actively looted and vandalized.
- Two Colonial home sites within the Lower Potomac River properties in Maryland, which show evidence of illegal metal detecting and looting activities.
- Numerous historic lighthouses of the Great Lakes region and along the southeastern Atlantic coast, which are being threatened by natural erosion, intense public visitation, and benign neglect.
- Important archaeological deposits on islands in the Lake Vermilion Management Area, which are being exposed by erosion and recreational (visitor) activity.

4. Major Accomplishments

- Monitored sites and assessed damage at eight BLM-managed islands known to contain archaeological sites in the Lake Vermilion Recreation Area of Minnesota. This project resulted in practical information about visitor use and related disturbance to archaeological sites.
- Awarded a contract in 2002 for an intensive (Class III) archaeological inventory of all remaining (62) islands in Lake Vermilion. This contract will lay the foundation for future archaeological evaluation and data recovery with the assistance of partners and volunteers.

- Completed the transfer of two National Register lighthouse properties from the U.S. Coast Guard to BLM and a combination of State and local governments in Michigan. These were two of the first successful transfers of historic lighthouses by BLM under the Recreation and Public Purposes Act.

5. Ethnic, Tribal, and Other Groups to Whom BLM Cultural Resources Are Important

The Eastern States cultural heritage program staff consults with many parties interested in the management and protection of archaeological, historical, and traditional properties within the 31 States east of the Mississippi River. The list of interested parties is constantly growing based on the location and visibility of each particular BLM undertaking. Consistent involvement can be expected from federally and nonfederally recognized tribes; Tribal Historic Preservation Offices; State Historic Preservation Offices; and other Federal, State, and local agencies.

There are more than 100 federally and nonfederally recognized tribes within the Eastern United States. Any one of these tribes may become involved in BLM project consultation at any time, given the breadth of activities taking place within the Eastern States. The Eastern States cultural program staff has recently consulted with Native American governments in Arkansas, Kansas, Louisiana, Maryland, Michigan, Minnesota, Mississippi, and Wisconsin.

The large geographic area of the Eastern States region poses both challenges and opportunities for unique benefits in managing cultural resources. The Eastern States program is well-positioned to connect with a large segment of the eastern urban population, which comprises nearly two-thirds of the entire U.S. population. Traditionally, the urban population—composed of many national, ethnic, and cultural affiliations—is relatively unfamiliar with the management of cultural resources on public lands. Established programs, such as America's Outdoors and Project Archaeology, and other highly visible cultural heritage partnerships reach out to ethnic and cultural groups about the BLM and the value of preserving cultural resources on public lands.

6. Existing Partnerships

- The National Park Service, U.S. Forest Service, U.S. Fish and Wildlife Service, and the Natural Resources



Dozens of submerged shipwrecks are located in and around properties managed by Eastern States along the Potomac River in Maryland.

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Heritage tourism opportunities—
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Conservation Service for the America's Outdoors Program, based in the Milwaukee Field Office. America's Outdoors provides information to the public about outdoor recreation, cultural and historic resources, and environmental education. America's Outdoors employs a professional staff to coordinate citizen-based projects and activities.

- The Mississippi Valley Archaeological Center (MVAC) in LaCrosse, Wisconsin, for support of the Eastern States cultural program and America's Outdoors. MVAC represents the Eastern States Office in the Project Archaeology program and has conducted teachers' workshops, organized curriculum, and provided Milwaukee Public School teachers and students with materials and presentations related to archaeology.
- The Maryland Historical Trust, State Underwater Archaeology Program, for the management, protection, and interpretation of submerged cultural resources (shipwrecks) in and around the Lower Potomac River tracts. The State of Maryland Department of Natural Resources and the BLM in Eastern States cooperatively manage these resources.
- The Michigan Lighthouse Project, a multiagency organization, for the transfer, management, and stewardship of historic lighthouses throughout the Great Lakes States. The Eastern States Office is a charter member of this organization.
- The National Park Service in Tallahassee, Florida, for assistance with the archaeological evaluation of historic period sites on BLM lands within Florida.

7. Economic Benefits

To attempt to estimate the economic benefits of BLM cultural heritage properties throughout the Eastern States would be difficult because the daily management of these properties is typically provided by other agencies and organizations. Heritage tourism opportunities—from which economic benefits would potentially be derived—are currently being explored in places of active management, such as sites along the Lower Potomac River in Maryland and through programs offered by America's Outdoors.

Paleontological Resources

1. Program Summary

The Eastern States paleontology program occasionally calls upon the expertise of a shared paleontologist located in Colorado and frequently borrows from the skills of field office geologists with experience and interest in paleontology. The expansive area of the Eastern States boundaries and the wide variety of BLM actions throughout the region can generate challenges unique to managing paleontological resources. These challenges can also present opportunities to showcase BLM and the resources it is charged with managing. For example, just within the boundaries of the Eastern States there are:

- Over 280 colleges with paleontology programs.
- At least 300 amateur rock, mineral, and fossil clubs with tens of thousands of members.
- Fifty-five museums with online discussions of their paleontological collections, including the Peabody Museum at Yale, the American Museum of Natural History in New York City, the Field Museum of Natural History in Chicago, and the National Museum of Natural History in Washington DC.
- Thirty-one States with their own paleontological programs in their departments of natural resources, parks, or geological surveys.

Small strides have been made by Eastern States to engage some of these interested parties in the management and protection of paleontological resources. However, the potential for cooperation and coordination among these parties and BLM is enormous.

2. State Paleontological History

In the Eastern States, the ancient past is well-represented by sites of geologic and paleontologic significance. From the site of the first dinosaur discovery to the locations of the major glaciations to some of the oldest rocks pointing to the origin of life on Earth, the Eastern States Office has an immense breadth of paleontological resources.

The Atlantic coastal states have Recent and Cenozoic deposits, with some world-famous locations for marine and terrestrial ver-

In the Eastern States, the ancient past is well-represented by sites of geologic and paleontologic significance.



The Betty Brinn Children's Museum in Milwaukee sponsors a children's workshop as part of the public outreach and education component of Eastern States' paleontology and geology program.



The most
ancient remnants
of the Earth's
crust can be
seen in the
Superior Upland
of Wisconsin and
Minnesota.



8 Eastern States

tebrates. BLM's Douglas Point tract in the Lower Potomac River planning area is an area rich in fossils, including sharks, rays, and marine invertebrates, from the Cenozoic era. Further inland, Connecticut, New Jersey, and Maryland contain Mesozoic era dinosaur fossils, which were some of the first to be professionally studied in the Western Hemisphere.

The Appalachian and Illinois Basins are rich in Mississippian and Pennsylvanian plant fossils, not only in their extensive coal deposits, but also in the shales and sandstones near these deposits. Extensive Paleozoic era outcrops are scattered throughout the East and contain rich assemblages of brachiopods, trilobites, corals, and other marine fossils. Several other diagnostic formations are located within the boundaries of the Eastern States—including a famous Silurian reef within walking distance of the BLM's Milwaukee Field Office and now adjacent to Miller Park, the Milwaukee Brewers' baseball stadium.

The most ancient remnants of the Earth's crust can be seen in the Superior Upland of Wisconsin and Minnesota. The Superior Upland is the largest U.S. surface exposure of the ancient (2.6- to 1.6-billion-year-old) core of the North American continent, known geologically as the Canadian Shield. Now an area of low topographic relief, these metamorphic rocks once formed mountains. Some of the highly altered rocks have been important sources of iron, copper, and other industrial minerals. These deposits are some of the earliest evidence of the environmental impacts of the development of life on Earth. The changes in the composition of the atmosphere and early ocean waters caused the widespread deposition of the metal oxides now mined as ores.

Some of the most basic principles of modern geology are evident in Florida. It is one of the many geological appendages to eastern North America to provide evidence of its overseas origin, hidden beneath a cover of Tertiary and Quaternary sediments. The underlying rocks, known from cores brought to the surface from drill holes, are an upper-Precambrian to lower-Paleozoic piece of western Africa that was added to the continent during formation of Pangaea and left behind in the early Mesozoic, when Pangaea broke up and created the Atlantic Ocean.

The Valley and Ridge Province, which cuts a 900-mile long swath through the Eastern States from New York to Alabama, clearly demonstrates alternating beds of hard and soft Paleozoic sedimentary rocks resembling folds or wrinkles. It is flanked by

flat-lying sedimentary strata to the west and Precambrian metamorphic rocks to the east. This famous belt of parallel structures reflects the several great continental collisions that formed the Appalachian chain and the Pangaea supercontinent some 300 to 400 million years ago.

Another striking feature on the geologic map is a giant “bull’s-eye” formation around the State of Michigan and extending into Illinois, Ohio, Indiana, Wisconsin, and Ontario. This pattern outlines the Michigan Basin, a bowl-shaped structure that contains over 4 kilometers of inward-dipping Paleozoic strata and a veneer of Jurassic sedimentary rocks. It subsided rapidly from Cambrian to Silurian time as it filled with shallow-water marine sediments, some of which host deposits of petroleum, coal, and salt.

Continental glaciers once scoured the northern part of the Eastern States and have been the focus of glacial geology studies for over a century. Terminal moraines can be traced for hundreds of miles across the Eastern States. Across northern Ohio and Indiana, traces of an old east-west drainage system, buried by glacial deposits, are conspicuous. The presence of the pre-Pleistocene Teays River is revealed as a sinuous, branching pattern of Ordovician rocks surrounded by overlying Silurian strata. The old river channel was abandoned when the movements of early Pleistocene ice and the emplacement of glacial deposits diverted its course southward to the Ohio River drainage, probably about 2 million years ago.

These examples are a small fraction of the geologic and paleontological treasures within the borders of the Eastern States. Local, national, and even worldwide attention to many of these locations provides a natural, and often enthusiastic, audience for the BLM to showcase its paleontological program.

3. Paleontological Resources At Risk

Paleontological resources of the Eastern United States are at risk due to many forces:

- Increasing interest in fossil collection by amateur and professional collectors has put pressure on existing outcrops.
- Urban development is encroaching into many geologically sensitive areas and there is increased building on steep slopes and in previously remote locations.



Erosion of the Potomac River shoreline in Maryland is exposing and endangering important archaeological and paleontological resources.

Continental glaciers once scoured the northern part of the Eastern States and have been the focus of glacial geology studies for over a century.



The land acquisitions in Maryland and Virginia and activities with the Betty Brinn Children's Museum attract visitors and contribute to the economies of these areas.



4. Major Accomplishments

The Eastern States paleontology and geology programs:

- Made numerous presentations, such as at the Wisconsin Geological Society's annual show, at the Boy Scout Jamboree, and in classrooms, to a wide variety of groups. All of these presentations, which were given by staff geologists from Milwaukee, Wisconsin, Rolla, Missouri, and Jackson, Mississippi, included a message of respect for the land and its resources and of the rules governing collecting all kinds of resources from Federal lands.
- Supported the "Inside the Earth" exhibit at the Betty Brinn Children's Museum. The Milwaukee Field Office provided a live "Ms. Frizzle" for the exhibit.
- Developed a teaching kit about geology and paleontology for Milwaukee public school teachers and students. The kit is being prepared by America's Outdoors.

5. Existing Partnerships

- The Maryland Department of Natural Resources Heritage Program and other State agencies to develop two recently acquired properties in Maryland and Virginia.
- The U.S. Forest Service and the U.S. Army Corps of Engineers, through long-term agreements, to manage and protect sensitive geological and paleontological resources.
- The Betty Brinn Children's Museum in Milwaukee to educate children about geology and paleontology and hold events that involve a nature theme.
- The Wisconsin Geological Society to present and distribute information to professional and public attendees at its annual exhibition.
- Local scout troops to provide presentations and workshops relative to managing cultural and paleontological resources.

6. Economic Benefits

The land acquisitions in Maryland and Virginia and activities with the Betty Brinn Children's Museum attract visitors and contribute to the economies of these areas.



The Bureau of Land Management *Today*

Our Vision

To enhance the quality of life for all citizens through the balanced stewardship of America's public lands and resources.

Our Mission

To sustain the health, diversity, and productivity of the public lands for the use and enjoyment of present and future generations.

Our Values

To serve with honesty, integrity, accountability, respect, courage, and commitment to make a difference.

Our Priorities

To improve the health and productivity of the land to support the BLM multiple-use mission.

To cultivate community-based conservation, citizen-centered stewardship, and partnership through consultation, cooperation, and communication.

To respect, value, and support our employees, giving them resources and opportunities to succeed.

To pursue excellence in business practices, improve accountability to our stakeholders, and deliver better service to our customers.



